

Amendments to the Claims:

Please amend the claims as indicated.

1. (Currently Amended) A modeling apparatus for provisioning a storage resource, the apparatus comprising:

a storage device storing executable code;

a processor executing the executable code, the executable code comprising

a provisioning module receiving a storage alert for a client in response to detecting a need to extend a file system for the client;

a specification module ~~configured to specifying~~ a Logical Unit Number (LUN) storage resource of a plurality of ~~existing~~ storage resources corresponding to the file system ~~client~~ as a model storage resource in response to the storage alert ~~a modeling policy~~;

a monitoring module ~~configured to monitoring~~ the plurality of existing storage resources and identifying a first ~~model~~ storage server and a first ~~model~~ storage pool ~~for~~ of the model storage resource ~~in the modeling policy~~, wherein the first storage pool comprises the model storage resource and the first ~~model~~ storage server manages a plurality of storage pools comprising the first ~~storage pool~~;

~~a policy module configured to store a plurality of storage provisioning policies, the plurality of storage provisioning policies comprising the modeling policy; and the~~ a provisioning module ~~configured to receive a storage alert for the client and provisioning~~ a new LUN storage resource for the file system ~~client~~ in the

firstmodel storage pool if the new LUN storage resource can be provisioned in the firstmodel storage pool, wherein the new LUN storage resource includes all attributes of the model storage resource; and
the provisioning module else if the new LUN storage resource cannot be provisioned in the model storage pool, provisioning the new LUN storage resource for the file system client in one of the plurality of any storage pools managed by the firstmodel storage server if the new LUN storage resource cannot be provisioned in the first storage pool, wherein the new LUN storage resource comprises all of the attributes of is modeled after the model storage resource.

2-6. (Canceled)

7. (Currently Amended) The apparatus of claim 6¹, wherein the model group comprises a volume group used by the client.

8-9. (Canceled)

10. (Original) The apparatus of claim 1, wherein the new storage resource is assigned to a raw logical volume and expands a storage capacity of the raw logical volume.

11. (Currently Amended) A system for provisioning a storage resource, the system comprising:

a client having a file system and comprising a first storage device storing executable code and a first processor executing the executable code;

a storage resource manager server comprising a second storage device storing the executable code and a second processor executing the executable code, the storage resource server configured to monitoring a plurality of existing storage resources corresponding to the file system for the client, receiving a storage alert for the client in response to detecting a need to extend the file system, specifying a LUN storage resource as a model storage resource in a modeling policy, wherein the model storage resource is one of the plurality of existing storage resources, identifying a first model storage server and a first model storage pool for the model storage resource in the modeling policy, wherein the first storage pool comprises the model storage resource and the first model storage server manages a plurality of storage pools comprising the first storage pool, receive a storage alert for the client, and provisioning a new LUN storage resource for the file system client in the model storage pool if the new LUN storage resource can be provisioned in the first model storage pool, wherein the new LUN storage resource includes all attributes of the model storage resource, else if the new LUN storage resource cannot be provisioned in the model storage pool, provisioning the new LUN storage resource for the file system client in one of the plurality of any storage pools managed by the first model storage server, wherein the new storage resource comprises all of the attributes of is modeled after the model storage resource; and

the model storage server configured to managing the model storage resource and the new LUN storage resource.

12-14. (Canceled)

15. (Currently Amended) A computer readable storage medium storing comprising computer readable code executed by a processor to configured to carry out a process for provisioning a storage resource, the process comprising:

receiving a storage alert for a client in response to detecting a need to extend a file system for the client;

specifying a LUN storage resource of a plurality of existing storage resources corresponding to the file system~~a client~~ as a model storage resource in response to the storage alert ~~modeling policy~~;

monitoring the plurality of ~~existing~~ storage resources, wherein one of the plurality of ~~existing~~ storage resources is designated as the model storage resource in the modeling policy;

identifying a first~~model~~ storage server and a first~~model~~ storage pool ~~for~~of the model storage resource ~~in the modeling policy~~, wherein the first storage pool comprises the model storage resource and the first~~model~~ storage server manages a plurality of storage pools comprising the first storage pool;

storing a plurality of storage provisioning policies, the plurality of storage provisioning policies comprising the modeling policy;

receiving a storage alert for the client; and

provisioning a new storage resource for the file system~~a client~~ in the first~~model~~ storage pool if the new LUN storage resource can be provisioned in the first~~model~~ storage pool ~~else if the new LUN storage resource cannot be provisioned in the model storage pool, wherein the new LUN storage resource includes all attributes of the model storage resource; and~~

~~provisioning~~ the new LUN storage resource for the client in one of the plurality of ~~any~~ storage pools managed by the first~~model~~ storage server ~~if the new LUN storage resource cannot be provisioned in the first storage pool, wherein the new storage resource comprises all of the attributes of~~ ~~is modeled after~~ the model storage resource.

16-28. (Canceled)

29. (New) The apparatus of claim 1, the attributes of the model storage resource comprising a Redundant Array of Independent Disks (RAID) structure, a redundancy of paths, and a minimum size.

30. (New) The apparatus of claim 29, wherein the file system is an application layer in a storage management environment, the storage management environment further comprising a logical layer and a physical layer, the logical layer comprising the plurality of storage resources.

31. (New) The apparatus of claim 30, the logical layer further comprising a logical volume device driver in the storage management environment that maps each storage resource to a physical volume of a plurality of physical volumes, the physical volumes forming a volume group, each physical volume comprising a stripe of a storage device.

32. (New) The apparatus of claim 31, the provisioning module provisioning the new LUN storage resource in a first volume group of the model storage resource if the new LUN storage resource cannot be provisioned in the model storage pool and one of the plurality of storage pools managed by the model storage server.

33. (New) The system of claim 11, the attributes of the model storage resource comprising a RAID structure, a redundancy of paths, and a minimum size.

34. (New) The system of claim 33, wherein the file system is an application layer in a storage management environment, the storage management environment further comprising a logical layer and a physical layer, the logical layer comprising the plurality of storage resources.

35. (New) The system of claim 34, the logical layer further comprising a logical volume device

driver in the storage management environment that maps each storage resource to a physical volume of a plurality of physical volumes, the physical volumes forming a volume group, each physical volume comprising a stripe of a storage device.

36. (New) The system of claim 35, the provisioning module provisioning the new LUN storage resource in a first volume group of the model storage resource if the new LUN storage resource cannot be provisioned in the model storage pool and any storage pool managed by the model storage server.

37. (New) The computer readable storage medium of claim 15, the attributes of the model storage resource comprising a RAID structure, a redundancy of paths, and a minimum size.

38. (New) The computer readable storage medium of claim 37, wherein the file system is an application layer in a storage management environment, the storage management environment further comprising a logical layer and a physical layer, the logical layer comprising the plurality of storage resources.

39. (New) The computer readable storage medium of claim 38, the logical layer further comprising a logical volume device driver in the storage management environment that maps each storage resource to a physical volume of a plurality of physical volumes, the physical volumes forming a volume group, each physical volume comprising a stripe of a storage device.

40. (New) The computer readable storage medium of claim 39, the provisioning module provisioning the new LUN storage resource in a first volume group of the model storage resource if the new LUN storage resource cannot be provisioned in the model storage pool and any storage pool managed by the model storage server.